

**United States of America**  
**PRELIMINARY VIEWS ON WRC-07**

**Agenda Item 1.11** to review sharing criteria and regulatory provisions for protection of terrestrial services, in particular the terrestrial television broadcasting service, in the band 620-790 MHz from broadcasting-satellite service networks and systems, in accordance with Resolution **545** (WRC-03);

**ISSUE**

In Region 2 the 620-790 MHz band is used only by terrestrial services. This band has been mostly used by the broadcasting services; however, with the transition to digital TV, other terrestrial users in the mobile service will start to use parts of this band.

Given the possibility that satellites using the HEO orbit may be deployed in the band in other Regions, it is important to ensure that the protection of Region 2 terrestrial services from harmful interference from broadcast-satellite transmissions

**BACKGROUND**

This matter actually had its genesis in discussions surrounding agenda item 1.37 (to consider the regulatory and technical provisions for satellite networks using highly elliptical orbits) at WRC-03. Proposal EUR/13A37/3, a draft Resolution on the study of provisional pfd limits and studies concerning regulatory and technical provisions for satellite systems using highly elliptical orbits (HEOs), included a *resolve* on provisions applicable to HEO satellite systems using the 620-790 MHz BSS allocation. Likewise, Arab administrations proposed that HEO use in the 620-790 MHz band also be studied for WRC-07 (see ARB/27A31/3).

These proposals resulted in WRC-03 establishing agenda item 1.11 for WRC-2007 and resolution, **Res. 545(WRC-03)**, *“Technical and regulatory procedures relating to the broadcasting-satellite service networks operating in the 620-790 MHz band.”*

Resolution **545** details the technical and regulatory procedures relating to the operation of BSS networks in this band. In summary, BSS networks that were not operational at the end of WRC-03, will neither be coordinated, nor notified, nor brought into use until the end of WRC-07, so that this WRC can reach a conclusion based on the agenda item 1.11 studies. Under *resolves 6*) of Resolution **545**, the relationship between GSO and non-GSO networks in this band will be decided by WRC-07. In the interim, No. **22.2** applies to networks received by the Bureau before WRC-03. Even though the US does not use this band for BSS, which type of network would have precedence over the other in coordination is of interest to the US, since non-GSO (such as HEO) and GSO networks impact terrestrial networks differently in terms of interference mechanisms.

BSS operation can occur in the 620-790 MHz band via the provision **5.311 (WRC-03)** of the Radio Regulations, subject to agreement by affected administrations and with a pfd constraint.

In the United States two band plans; one for 698-746 MHz, the lower 700 MHz band plan (former UHF broadcasting channels 52-59); and the upper 700 MHz plan for the 746-806 MHz band (former UHF channels 60-69) are available for commercial terrestrial services. The upper 700 MHz band has 36 MHz allocated for commercial use (746-794 MHz), and the remaining 24 MHz allocated for public safety use. The U.S. Congress established 31 December 2006 as the target date for the completion of the transition to digital TV. The FCC has already auctioned off 18 MHz of the lower 700 MHz band, and no auction date for the remaining spectrum in this

segment has been announced. A 6 MHz channel in the upper 700 MHz spectrum has so far been auctioned.

The 620-698 MHz band (UHF channels 39-51) will constitute a major part of the total bands allocated to television broadcasting, particularly as the US transitions from analog to digital television.

For further details on the reallocation of the 698-790 MHz band in the US, see Doc. 8A-160, *“Information paper on the reallocation of the 698-806 MHz frequency band in the United States,”* April 11-15, 2005 meeting of ITU-R WP 8A.

## **US VIEW**

Recognizing a long history of terrestrial broadcasting in the band 620-790 MHz, and the future use of this band will continue to be for terrestrial applications; the US is first and foremost concerned with the unconstrained and unhindered development and of these applications, be they broadcasts, public safety, and other mobile applications in the reallocated segment. The BSS operations in the 620-790 MHz band must not negatively impact the current and future use of this band by terrestrial services.